

FROM STREET-SMART TO WEB-WISE[®]

Madeline Parisi & Associates LLC, (MPA) a Women Business Entity and as Principal Investigator, has developed a team including Subject Matter Experts (SME) and Instructional Designers (ID), to combine our mutual and complimentary experience in the areas of Education, Information Technology, Cyber Security, and Instructional Design, and custom design an online interactive program intended for students at all levels of K-12. Through various media outlets, we are aware of the vulnerabilities that arise due to existing and emerging cyber threats. Our goal is to develop a cyber training program, applicable to students who are provided with internet-enabled devices. Scenario-based training is the methodology to be used to provide value, and to capture the attention of this age group.

The scenarios will take an objective-based approach that is adaptive to a wide range of education and maturity levels. Although there are several training solutions on the market, we are unable to locate interactive age and interest-appropriate training. The proposed scenarios can work as standalone or asynchronous self-paced computer-based modules.

Training Scenarios begin as early as Kindergarten through Second Grade where children will be introduced, as an example, to topics concerning privacy and digital footprints through the use of character animations and whimsical content. Grades three and four will be introduced to topics such as pass phrases and next level Personal Identifiable Information (PII). Grades five through eight will develop into topics that deal with social media, cyber stalking, cyber bullying, and cyber grooming, as deemed age-appropriate.

High School level students may be involved in the program development as many now have structured incubator business development programs as part of the curricula. Curriculum may be designed and developed for these grades, concluding in a very mature game environment consisting of PII to include informational learning on what would be expected of them as they enter the workforce and are using company assets. As young adults graduate school and begin their transition into the workforce, our full life-cycle of training for the work place may continue with them.

In classroom environments and in child-serving organizations, young children have access to internetenabled devices. Classroom devices may have restricted access, but what happens when the child has free access to an internet-enabled device? Training for safe use, if any, falls to the teacher/program leader. Facilitator's guides as well as information sheets are provided to parents, group leaders, or teachers to assist in the learning process. This construct allows for product marketing at any level from individual users, child-serving organizations, school systems, and many more. All scenarios for in each age group will have formative assessments through embedded activities that self-grade the user, as well as cumulative assessments at the end of the modules that can generate reward systems or certificates to show accomplishment. Intelligent tutoring will be embedded in the scenarios to bring learners back for remediation on objectives that were not successfully completed.

A badge system may also be incorporated to include the community in the cause of safe internet use for children. Learners earn badges as they progress and may redeem the badge with local community services and stores. Examples include the first level badge is redeemed at the local ice cream shop for a scoop/cone.

Lastly, the life-cycle of training may continue into the more senior population. As our older counterparts did not grow up in the same technological age, they have become increasingly susceptible to phishing scams. Additional modules may be developed with scenarios would include topics such as giving up PII, different types of phishing attempts, and how to create a safe online persona. An additional application for this target group is senior centers, church groups, libraries, and other organizations that keep seniors in-the-know. Today, many seniors are care-givers to grand-children and other young ones, and they must be aware when in this supervising role. This demographic is another opportunity for development and we welcome working with other organizations in expansion.

As our society rapidly approaches the Internet of Things, common knowledge is no longer sufficient to protect our business or personal interests. Safety in the ever evolving digital landscape requires constant vigilance and knowledge of the legions of cyber-criminal actors whose goal is to compromise our networks, steal our personal information and exploit our digital resources for financial gain.

The goal of this program is to help mitigate these threats through the use of engaging and interactive Cyber Education Scenarios designed to make our customers Cyber Smart and Web-Wise.

Overview: From Street Smart to Web Wise[®] creates both awareness and educates in life-skills training, through an interactive learning program, presented via a gender, race and ethnicity-equitable education platform, to take responsibility in an effective and proactive manner for the safeguarding of personal privacy and personally identifiable information (PII).

Educating children, who tend to be more trusting and vulnerable than adults, to be aware that they must safeguard and not disclose any personal information about themselves or their family members, is an essential life-skill. The interactive training program to be developed in this program will provide participants with life-skill challenges that address privacy concerns/issues via age-specific problem solving activities.

Parents have desired to do everything within their power to protect and safeguard their children. Child-serving organizations have this responsibility as well. This interactive learning program will provide educators and parents with the tools necessary to prepare children destined to live in today's digitally connected, socially wired, unfiltered, 24/7 immediate access to information world. Where parents once used to want street-wise kids, increasingly, parents today need to raise web-wise children.

Intellectual Merit: This interactive learning program developed will lead to effective models and pedagogic approaches to teaching students, thereby increasing the young learner's personal privacy protection level and awareness as they advance and mature. This program may be integrated by teachers and teacher aides into a broader curriculum that may include in other educational activities, and used by additional organizations such as Big Brothers, Big Sisters; Boys and Girls Clubs of America, local or municipal after-school-programs, and child-serving agencies.

Technology and enhanced education delivery programs such as this privacy training program creates a primer-level awareness for earlier grade levels, to provide awareness and to empower children and organizations, giving them a stronger connection, realization and ability to comprehend and fortify themselves against the challenges they face daily...the increasing erosion of one's privacy and the ability to secure and keep private data...private. At higher grade levels the awareness and activities become more complex and may also engage the learner in development in various incubator programs.

Broader Impact: In today's globally connected world, training and awareness in the proactive protection of one's private data, is necessary as well as essential. We are also becoming aware that this training is needed at an increasingly younger age, and a program or curriculum that is focused on creating awareness and teaching young children about online, Internet-focused privacy is necessary.

Learning is becoming more blended with less paper-based instruction. As children progress to upper grades, the application of technology becomes greater, leading to eventual workplace requirements, which may become entirely digitally based.

There is also a socioeconomic divide – those with and without technology exposure in the home. When economic situations do not allow for internet, laptops and tablets, there is also no opportunity to develop an awareness of basic online privacy concerns. This program, offered in schools and other childserving environments, will prepare children for the eventual exposure and for their future development.